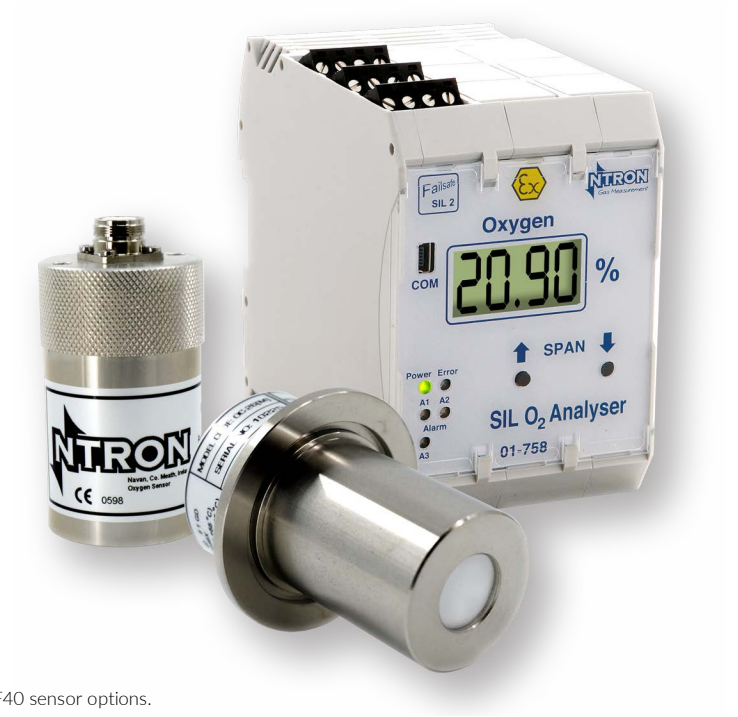
Oxygen Analyzer

SILO2

SIL2-capable Oxygen Analyzer

SILO2 is a high-quality, low-maintenance analyzer with remote sensor, approved for hazardous area use. This SIL2-capable system is designed for OEM and end-users for inertization applications such as centrifuges, reactors, mills, glove boxes and vent headers. Using two continuous self-monitoring microprocessors, SILO2 delivers fail safe oxygen measurements in demanding safety-critical applications, requiring compliance with the requirements of IEC 61508 SIL2.



SIL2 Capable

Pictured with OC-25M and OC-26M KF40 sensor options.

Highlights

- Market-leading solution for SIL-capable oxygen measurement
- Inbuilt analyzer and galvanic isolation barrier in one device
- Ease of integration for OEM applications
- Analog 4...20 mA output
- Sensor design for installation in Zone 0 hazardous area

Applications

- Additive Manufacturing
- Inerting of glove box and containment solutions
- Inerting control in API pharmaceuticals
- Powder handling
- Gas generation
- H_2 electrolyzers

Technical Specifications

Sensors			
Solid State (S-S)	**OC-25 / OC-25M**	**OC-26 / OC-26M**	**OC-200 series**
Measurement Range	0...25 $\%O_2$		
Accuracy	Please see Accuracy Table below		
Output Resolution	0.01 $\%O_2$		
Lower Detection Limit (LDL)	0.02 % +/- 0.01		
Response Time (T90)	<20 seconds, typically 12 seconds		
Operating Temperature Range	-20 °C...+50 °C (-13 F...122 °F)		
Pressure Range	950...1050 mBar $_{abs}$		
Life Expectancy (application dependent)	Up to 24 months		12 months
Humidity	0...95 %rh non-condensing		
Process Connection	2" Tri-clamp / Flow-through	KF40 flange	Via Oxy Extract: 2" Tri-clamp / ANSI 150
Shelf Life	12 months		Up to 6 months
Calibration Interval (application dependent)	6...12 months		

Analyzer	
Electrical	
Display	LCD
Output Signal	4...20 mA
Digital Communication	RS485
Relay Output Options	2 x configurable alarm relays, 1 x fault alarm relay, 1 x transistor
Power Supply	24 V DC
Relay Contact Outputs RL1 / RL2 / Alarm	Switching power max.: 62.5 V A resp max. 30 W Switching voltage: Um 125 V AC / 110 V DC Min. current 10 uA DC Min. voltage 10 mV DC According to IEC 947-5-1 resp. EN 60947
Transistor Output (DO)	Switching parameters: < 28 V @ < 50 mA
Intrinsically Safe Connection	Voltage Uo = 6 V DC Current intensity Io = 0.2 mA Power Po = 0.3 mW Max. outer inductivity Lo = 1000 mH Max. outer capacity Co = 10 µF
Maximum Power Consumption	1.5 W
Indicators	LCD and LED alerts on analyzer
Mechanical	
Ingress Protection	IP20 enclosure
Housing Material	PBT
Mounting	35 mm din rail
Cable Length	I.S sensor connection 5 meter / 10 meter / 15 meter
Standards and certification	

ETL: UL-610101-1, **EMC:** EN 50270, **ATEX Classification:** Ex ia Ga IIC 1 G, Ex ia Da IIIC 1 D, **ATEX Standard:** EN 61000, **UKCA**

Dimensions (mm)

70

145.5

100

Accuracy Table

Accuracy at standard temperature and pressure (STP)	
Range	
25 %	+/- 0.02 % @ 1 %
	+/- 0.01 % @ 0.1 %

CAUTION

Ntron Gas Measurement is part of the Process Sensing Technologies Group (PST). As customer applications are outside of PST control, the information provided is given without legal responsibility. Customers should test under their own conditions to ensure the equipment is suitable for the intended application(s).

We adopt a continuous development program which sometimes necessitates specification changes without notice. For technical assistance or enquiries about other options, please contact us here: oxygen@processsensing.com.